

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently amended) A rolling code responsive movable barrier operator system for controlling access to a secure area comprising:

a fingerprint communicating unit disposed outside the secure area and remote from a barrier movement operator inside the secure area, the fingerprint communicating unit comprising:

a fingerprint sensor disposed outside the secure area which generates finger print code representative of a finger print and for generating a signal representative of the [[a]] fingerprint;

a transmitter controller which combines the finger print code signal representing the fingerprint with a separate rolling access code to provide a changing combined authorization code and a changing combined authorization code signal representative of the changing combined authorization code, which separate rolling access code is configured to effect access to the secured area by active communication with a rolling code acceptance apparatus and, which separate rolling access code changes as a result of each combined signal transmission in accordance with a predetermined algorithm to produce the changing combined authorization code and changing combined authorization code signal which is representative of the separate rolling access code and the finger print code with each encoded signal transmission;

a transmitter which emits for emitting the changing combined authorization code ~~encoded~~ signal representative of a sensed fingerprint from the fingerprint sensor and the separate rolling access code; and

the barrier movement operator comprising:

a receiver inside the secure area which receives for receiving the changing combined authorization code signal representative of the separate rolling access code and the sensed

fingerprint, the receiver having a learning mode in which a portion of the combined authorization code signal which is representative of the sensed fingerprint emitted by the transmitter is received by the barrier movement operator and stored in a memory thereof;

a fingerprint circuit disposed inside the secure area and responsive to the received changing combined authorization code signal, the fingerprint circuit for decoding the portion of the changing combined authorization code signal to identify the portion of the changing combined code signal representing the sensed fingerprint and for determining whether the portion of the signal representing the sensed fingerprint is representative of an authorized user, the finger print circuit effective for receiving the changing combined authorization code signal, separating the portion of the received changing combined authorization code signal representative of the sensed fingerprint from the separate rolling access code, and reading the stored signal representative of the sensed [a] finger print to verify authorized users without transmitting a signal to the transmitter;

the rolling code acceptance apparatus configured to determine for determining whether the separate rolling access code is acceptable after the fingerprint circuit verifies the authorized user; and

a barrier operator circuit which commands for commanding a barrier to assume a particular position when the sensed fingerprint is determined to be from an authorized user and the separate rolling access code is determined to be acceptable .

2. (Previously presented) A movable barrier operator system according to claim 1 wherein the fingerprint sensor comprises an optical fingerprint sensor.

3. (Previously presented) A movable barrier operator system according to claim 2 wherein the optical fingerprint sensor is an electroluminescent fingerprint sensor.

4. (Previously presented) A movable barrier operator system according to claim 2 wherein the fingerprint sensor comprises a charged coupled device for generating a signal from which the signal representative of the sensed fingerprint is produced.

5. (Previously presented) A movable barrier operator system according to claim 1 wherein the transmitter comprises a radio frequency transmitter and the signal representative of the sensed fingerprint is a radio frequency signal.

6. (Previously presented) A movable barrier operator system according to claim 1 wherein the transmitter comprises a wall control.

7. (Previously presented) A movable barrier operator system according to claim 1 further comprising a memory associated with the fingerprint sensor and the transmitter for storing information indicative of the fingerprint.

8. (Previously presented) A movable barrier operator system according to claim 1 wherein the fingerprint circuit compares a coded identification transmission for operation of the barrier operator circuit.

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14. (Currently Amended) A rolling code responsive movable barrier operator system for controlling access to a secure area comprising:

a fingerprint sensor disposed outside the secure area which generates finger print code representative of a finger print and a signal representative of a fingerprint;

a transmitter controller outside the secured area which combines the finger print code signal representing the fingerprint with a separate rolling access code to provide a changing combined authorization code and changing combined authorization code signal, which separate

rolling access code is configured to effect access to the secured area by active communication with a rolling code acceptance apparatus and which separate rolling access code changes in accordance with a predetermined algorithm to produce the changing combined authorization code and changing combined authorization code signal as a result of each combined signal with each encoded signal transmission;

a transmitter outside the secured area which emits the changing combined authorization code signal prior to verification that a sensed finger print is from an authorized user and which changing combined authorization code encoded signal includes a signal representative of the [a] sensed fingerprint from the fingerprint sensor and the separate rolling access code;

a receiver inside the secure area which receives the changing combined authorization code signal representative of the sensed fingerprint and the separate rolling access code, the receiver having a learning mode in which a portion of the changing combined authorization code signal representing a fingerprint emitted by the transmitter is received by the receiver and stored in a memory;

a fingerprint circuit disposed inside the secure area and responsive to the received changing combined authorization code signal which decodes the portion changing combined authorization code signal to identify the signal representing the sensed [a] fingerprint and which determines whether the signal representing the sensed [a] fingerprint is representative of an authorized user, the finger print circuit effective for receiving the changing combined authorization code signal, separating the received combined signal representative of the sensed fingerprint from the separate rolling access code, and reading the stored signal representative of a finger print to verify authorized users without transmitting a signal to the transmitter;

the rolling code acceptance apparatus inside the secured area which determines whether the separate rolling access code is acceptable after the fingerprint circuit verifies the authorized user; and

a barrier operator circuit inside the secured area which commands a barrier to assume a particular position when the fingerprint is determined to be from an authorized user and the separate rolling access code is determined to be acceptable .

15. (Currently Amended) A method for controlling a moveable barrier operator, the method comprising:

generating a signal and code representative of a sensed fingerprint from a fingerprint sensor disposed outside the secure area;

with a transmitter controller outside the secured area, combining the code signal representing the sensed fingerprint with a separate rolling access code to provide a changing combined authorization code and changing combined authorization code signal which includes the signal representative of the sensed finger print and the separate rolling access code, which separate rolling access code is configured to effect access to the secured area by active communication with a rolling code acceptance apparatus and which separate rolling access code changes in accordance with a predetermined algorithm to produce the changing combined authorization code signal which changes with each encoded signal transmission and which separate rolling access code changes as a result of each combined signal transmission in accordance with a predetermined algorithm to produce the changing combined authorization code signal;

emitting with a transmitter outside the secured area the changing combined authorization code signal representative of the [a] sensed fingerprint from the fingerprint sensor and the separate rolling access code;

receiving the changing combined authorization code signal representative of the sensed fingerprint and separate rolling access code with a receiver inside the secured area, the receiver having a learning mode in which the signal representing a fingerprint emitted by the transmitter is received by the barrier movement operator and stored in a memory;

determining whether a portion of the changing combined authorization code signal representing the sensed [a] fingerprint is representative of an authorized user with a fingerprint

circuit disposed inside the secure area, the finger print circuit responsive to the received changing combined authorization code signal for decoding the changing combined authorization code signal to identify the signal representing the sensed [a] fingerprint, the finger print circuit effective for receiving a finger print identifying signal representative of the sensed finger print, separating the received combined signal representative of the sensed fingerprint from the separate rolling access code, and reading the stored signal representative of a finger print to verify authorized users without transmitting a signal to the transmitter;

determining whether the separate rolling access code is acceptable after the fingerprint circuit verifies the authorized user to effect access to the secured area with the [[a]] rolling code acceptance apparatus inside the secured area; and

commanding a barrier operator to assume a particular position with a barrier operator circuit when the sensed fingerprint is determined to be from an authorized user and the separate rolling access code is determined to be acceptable.

16. (Previously Presented) A method according to claim 15 wherein the fingerprint sensor comprises an optical fingerprint sensor.

17. (Previously Presented) A method according to claim 16 wherein the optical fingerprint sensor is an electroluminescent fingerprint sensor.

18. (Previously Presented) A method according to claim 15 wherein the fingerprint sensor comprises a charged coupled device for generating a signal from which the signal representative of the sensed fingerprint is produced.

19. (Previously Presented) A method according to claim 15 wherein the transmitter comprises a radio frequency transmitter and the signal representative of the sensed fingerprint is a radio frequency signal.